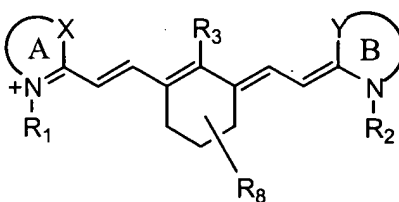


## IN THE CLAIMS

Please add new claims 43- as follows:

Claims 1. - 28. (Canceled).

29. (Currently amended) The A use of a fluorescent label in a particle for detecting an analyte comprising a particle having a fluorescent label of the formula:



wherein:

A and B each independently represent ring structures with sufficient carbon atoms to make up a cyanine nuclei;

X and Y are each independently selected from the group consisting of O, -S, NR<sub>9</sub>, and CR<sub>9</sub>R<sub>10</sub>;

R<sub>1</sub> and R<sub>2</sub> are each independently selected from the group consisting of H, C<sub>1</sub>-C<sub>20</sub> alkyl, C<sub>1</sub>-C<sub>20</sub> haloalkyl, C<sub>1</sub>-C<sub>20</sub> alkylene, and C<sub>1</sub>-C<sub>20</sub> haloalkylene;

R<sub>3</sub> is selected from the group consisting of H, halogen, OH, OR<sub>11</sub>, SR<sub>11</sub>, NR<sub>11</sub>R<sub>12</sub>, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> alkylene, C<sub>3</sub>-C<sub>6</sub> cycloalkyl, C<sub>3</sub>-C<sub>6</sub> cycloheteroalkyl, C<sub>3</sub>-C<sub>6</sub> cycloalkylene, C<sub>3</sub>-C<sub>6</sub> cycloheteroalkylene, phenyl, biaryl, heteroaryl, and heterobiaryl, wherein the C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> alkylene, C<sub>3</sub>-C<sub>6</sub> cycloalkyl, C<sub>3</sub>-C<sub>6</sub> cycloheteroalkyl, C<sub>3</sub>-C<sub>6</sub> cycloalkylene, C<sub>3</sub>-C<sub>6</sub> cycloheteroalkylene, phenyl, biaryl, heteroaryl and heterobiaryl groups are unsubstituted or substituted with halogen, OH, C<sub>1</sub>-C<sub>4</sub> alkyl, or C<sub>1</sub>-C<sub>4</sub> haloalkyl;

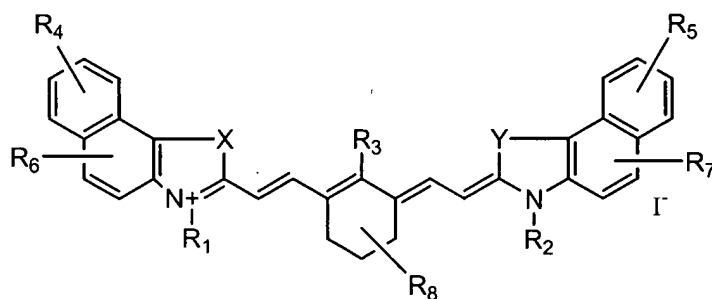
R<sub>8</sub> is selected from the group consisting of C<sub>1</sub>-C<sub>4</sub> alkyl, and C<sub>1</sub>-C<sub>4</sub> haloalkyl;

R<sub>9</sub> and R<sub>10</sub> are each independently selected from the group consisting of

hydrogen, C<sub>1</sub>-C<sub>4</sub> alkyl, and C<sub>1</sub>-C<sub>4</sub> haloalkyl; and

R<sub>11</sub> and R<sub>12</sub> are each independently selected from the group consisting of C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>6</sub> cycloalkyl, phenyl, biaryl, heteroaryl, or heterobiaryl, wherein the C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> cycloalkyl, phenyl, biaryl, heteroaryl, and heterobiaryl groups are unsubstituted or substituted with halogen, OH, C<sub>1</sub>-C<sub>4</sub> alkyl, or C<sub>1</sub>-C<sub>4</sub> haloalkyl, or when R<sub>3</sub> represents NR<sub>11</sub>R<sub>12</sub>, R<sub>11</sub> and R<sub>12</sub> may be taken together to form an optionally substituted C<sub>3</sub>-C<sub>6</sub> aliphatic or C<sub>3</sub>-C<sub>6</sub> aromatic heterocyclic ring.

30. (Previously presented) The use of a fluorescent label according to Claim 29 of the formula:

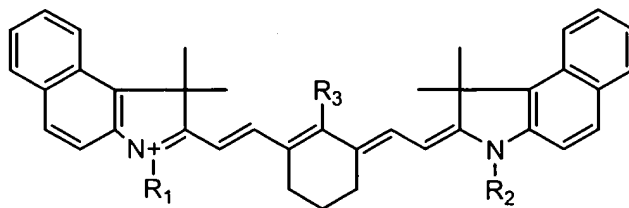


wherein:

R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, and R<sub>7</sub> are each independently selected from the group consisting of hydrogen, halogen, OH, C<sub>1</sub>-C<sub>4</sub> alkyl, or C<sub>1</sub>-C<sub>4</sub> haloalkyl, phenyl, and heteroaryl.

31. (Previously presented) The use of a fluorescent label according to Claim 31 wherein R<sub>1</sub> and R<sub>2</sub> are identical.

32. (Previously presented) The use of a fluorescent label according to Claim 31 of the formula:



wherein:

$R_1$  and  $R_2$  are each independently a  $C_1$ - $C_{20}$  alkyl; and

$R_3$  is H, halogen, or -S-phenyl.

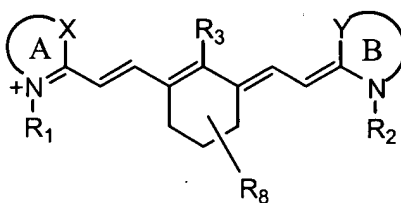
33. (Previously presented) The use of a fluorescent label according to Claim 29 wherein the ring structures represented by A and B are each independently a benzoindole ring.

34. (Previously presented) The use of a fluorescent label according to Claim 29 wherein the fluorescent label has a near-infrared excitation wavelength.

35. (Previously presented) The use of a fluorescent label according to Claim 29 wherein the fluorescent label has an emitting light greater than 750 nm.

36. (Previously presented) A method for incorporating a fluorescent label into a particle comprising:

- a) preparing a suspension of particles; and
- b) adding a solution of two or more fluorescent labels to the suspension, thereby incorporating the fluorescent labels into the particles, where at least one fluorescent label is a compound of the formula:



wherein:

A and B each independently represent ring structures with sufficient carbon atoms to make up a cyanine nuclei;

X and Y are each independently selected from the group consisting of O, S,  $NR_9$ , and  $CR_9R_{10}$ ;

$R_1$  and  $R_2$  are each independently selected from the group consisting of H,  $C_1$ - $C_{20}$  alkyl,  $C_1$ - $C_{20}$  haloalkyl,  $C_1$ - $C_{20}$  alkylene, and  $C_1$ - $C_{20}$  haloalkylene;

$R_3$  is selected from the group consisting of H, halogen, OH,  $OR_{11}$ ,  $SR_{11}$ ,  $NR_{11}R_{12}$ ,  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  alkylene,  $C_3$ - $C_6$  cycloalkyl,  $C_3$ - $C_6$  cycloheteroalkyl,  $C_3$ - $C_6$  cycloalkylene,  $C_3$ - $C_6$  cycloheteroalkylene, phenyl, biaryl, heteroaryl, and heterobiaryl, wherein the  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  alkylene,  $C_3$ - $C_6$  cycloalkyl,  $C_3$ - $C_6$  cycloheteroalkyl,  $C_3$ - $C_6$  cycloalkylene,  $C_3$ - $C_6$  cycloheteroalkylene, phenyl, biaryl, heteroaryl and heterobiaryl groups are unsubstituted or substituted with halogen, OH,  $C_1$ - $C_4$  alkyl, or  $C_1$ - $C_4$  haloalkyl;

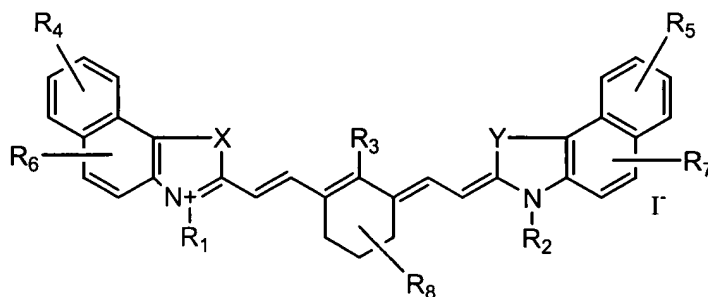
$R_8$  is selected from the group consisting of  $C_1$ - $C_4$  alkyl, and  $C_1$ - $C_4$  haloalkyl;

$R_9$  and  $R_{10}$  are each independently selected from the group consisting of hydrogen,  $C_1$ - $C_4$  alkyl, and  $C_1$ - $C_4$  haloalkyl; and

$R_{11}$  and  $R_{12}$  are each independently selected from the group consisting of  $C_1$ - $C_6$  alkyl,  $C_3$ - $C_6$  cycloalkyl, phenyl, biaryl, heteroaryl, or heterobiaryl, wherein the  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  cycloalkyl, phenyl, biaryl, heteroaryl, and heterobiaryl groups are unsubstituted or substituted with halogen, OH,  $C_1$ - $C_4$  alkyl, or  $C_1$ - $C_4$  haloalkyl, or when  $R_3$  represents  $NR_{11}R_{12}$ ,  $R_{11}$  and  $R_{12}$  may be taken together to form an optionally substituted  $C_3$ - $C_6$  aliphatic or  $C_3$ - $C_6$  aromatic heterocyclic ring.

37. (Previously presented) A method according to Claim 36 wherein the particles are polymeric beads.

38. (Previously presented) A method according to Claim 36 wherein at least one of the fluorescent labels is a compound of the formula:

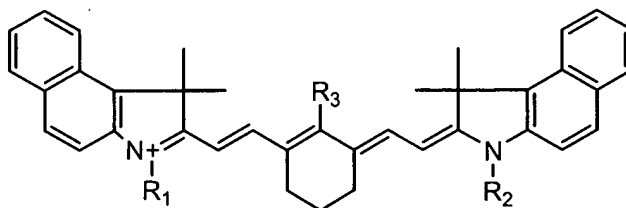


wherein:

$R_4$ ,  $R_5$ ,  $R_6$ , and  $R_7$  are each independently selected from the group consisting of hydrogen, halogen, OH,  $C_1$ - $C_4$  alkyl, or  $C_1$ - $C_4$  haloalkyl, phenyl, and heteroaryl.

39. (Previously presented) A method according to Claim 36 wherein in at least one of the fluorescent labels,  $R_1$  and  $R_2$  are identical.

40. (Previously presented) A method according to Claim 36 wherein at least one of the fluorescent labels is a compound of the formula:



wherein:

$R_1$  and  $R_2$  are each independently a  $C_1$ - $C_{20}$  alkyl; and

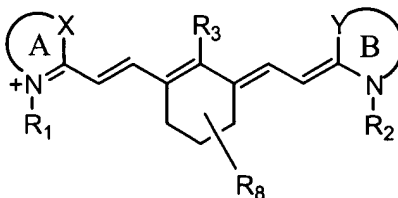
$R_3$  is H, halogen, or -S-phenyl.

41. (Previously presented) A method according to Claim 36 wherein in at least one of the fluorescent labels, the ring structures represented by A and B are each independently a benzoindole ring.

42. (Previously presented) A method according to Claim 36 wherein at least one of the fluorescent labels has a near-infrared excitation wavelength.

43. (Previously presented) A method according to Claim 36 wherein at least one of the fluorescent labels has an emitting light greater than 750 nm.

44. (New) A particle comprising a fluorescent label of the formula:



wherein:

A and B each independently represent ring structures with sufficient carbon

atoms to make up a cyanine nuclei;

X and Y are each independently selected from the group consisting of O, S, NR<sub>9</sub>, and CR<sub>9</sub>R<sub>10</sub>;

R<sub>1</sub> and R<sub>2</sub> are each independently selected from the group consisting of H, C<sub>1</sub>-C<sub>20</sub> alkyl, C<sub>1</sub>-C<sub>20</sub> haloalkyl, C<sub>1</sub>-C<sub>20</sub> alkylene, and C<sub>1</sub>-C<sub>20</sub> haloalkylene;

R<sub>3</sub> is selected from the group consisting of H, halogen, OH, OR<sub>11</sub>, SR<sub>11</sub>, NR<sub>11</sub>R<sub>12</sub>, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> alkylene, C<sub>3</sub>-C<sub>6</sub> cycloalkyl, C<sub>3</sub>-C<sub>6</sub> cycloheteroalkyl, C<sub>3</sub>-C<sub>6</sub> cycloalkylene, C<sub>3</sub>-C<sub>6</sub> cycloheteroalkylene, phenyl, biaryl, heteroaryl, and heterobiaryl, wherein the C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> alkylene, C<sub>3</sub>-C<sub>6</sub> cycloalkyl, C<sub>3</sub>-C<sub>6</sub> cycloheteroalkyl, C<sub>3</sub>-C<sub>6</sub> cycloalkylene, C<sub>3</sub>-C<sub>6</sub> cycloheteroalkylene, phenyl, biaryl, heteroaryl and heterobiaryl groups are unsubstituted or substituted with halogen, OH, C<sub>1</sub>-C<sub>4</sub> alkyl, or C<sub>1</sub>-C<sub>4</sub> haloalkyl;

R<sub>8</sub> is selected from the group consisting of C<sub>1</sub>-C<sub>4</sub> alkyl, and C<sub>1</sub>-C<sub>4</sub> haloalkyl;

R<sub>9</sub> and R<sub>10</sub> are each independently selected from the group consisting of hydrogen, C<sub>1</sub>-C<sub>4</sub> alkyl, and C<sub>1</sub>-C<sub>4</sub> haloalkyl; and

R<sub>11</sub> and R<sub>12</sub> are each independently selected from the group consisting of C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>6</sub> cycloalkyl, phenyl, biaryl, heteroaryl, or heterobiaryl, wherein the C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> cycloalkyl, phenyl, biaryl, heteroaryl, and heterobiaryl groups are unsubstituted or substituted with halogen, OH, C<sub>1</sub>-C<sub>4</sub> alkyl, or C<sub>1</sub>-C<sub>4</sub> haloalkyl, or when R<sub>3</sub> represents NR<sub>11</sub>R<sub>12</sub>, R<sub>11</sub> and R<sub>12</sub> may be taken together to form an optionally substituted C<sub>3</sub>-C<sub>6</sub> aliphatic or C<sub>3</sub>-C<sub>6</sub> aromatic heterocyclic ring.

45. (New) A particle according to Claim 44 wherein the fluorescent labels are embedded within the particle.

46. (New) A particle according to Claim 44 wherein the fluorescent label is capable of emitting light at a maximum wavelength greater than 750 nm.

47. (New) A particle according to Claim 44 wherein the particle comprises two or more than two fluorescent labels in a first combination of relative amounts, the fluorescent

labels being capable of being excited by light of a same excitation wavelength and capable of emitting lights at maximum wavelengths, distinguishable from each other, respectively.

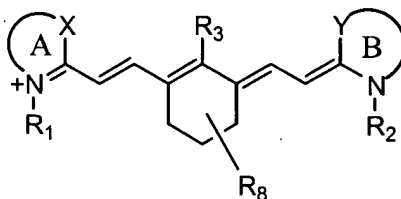
48. (New) A particle according to Claim 47 wherein the fluorescent labels both have emitting lights greater than 750nm.

49. (New) A particle according to Claim 47 wherein the excitation wavelength is about 780 nm.

50. (New) A particle according to Claim 47 wherein the fluorescent labels both have emitting lights greater than 750nm and the maximum wavelengths of the emitting lights of the fluorescent labels differs by at least 20 nm.

51. (New) A particle prepared by a process comprising:

- a) preparing a particle suspension; and
- b) adding a solution of two or more fluorescent labels to the suspension, thereby incorporating the fluorescent labels into the particle, where at least one fluorescent label is a compound of the formula:



wherein:

A and B each independently represent ring structures with sufficient carbon atoms to make up a cyanine nuclei;

X and Y are each independently selected from the group consisting of O, S, NR<sub>9</sub>, and CR<sub>9</sub>R<sub>10</sub>;

R<sub>1</sub> and R<sub>2</sub> are each independently selected from the group consisting of H, C<sub>1</sub>-C<sub>20</sub> alkyl, C<sub>1</sub>-C<sub>20</sub> haloalkyl, C<sub>1</sub>-C<sub>20</sub> alkylene, and C<sub>1</sub>-C<sub>20</sub> haloalkylene;

R<sub>3</sub> is selected from the group consisting of H, halogen, OH, OR<sub>11</sub>, SR<sub>11</sub>,

$\text{NR}_{11}\text{R}_{12}$ ,  $\text{C}_1\text{-C}_6$  alkyl,  $\text{C}_1\text{-C}_6$  alkylene,  $\text{C}_3\text{-C}_6$  cycloalkyl,  $\text{C}_3\text{-C}_6$  cycloheteroalkyl,  $\text{C}_3\text{-C}_6$  cycloalkylene,  $\text{C}_3\text{-C}_6$  cycloheteroalkylene, phenyl, biaryl, heteroaryl, and heterobiaryl, wherein the  $\text{C}_1\text{-C}_6$  alkyl,  $\text{C}_1\text{-C}_6$  alkylene,  $\text{C}_3\text{-C}_6$  cycloalkyl,  $\text{C}_3\text{-C}_6$  cycloheteroalkyl,  $\text{C}_3\text{-C}_6$  cycloalkylene,  $\text{C}_3\text{-C}_6$  cycloheteroalkylene, phenyl, biaryl, heteroaryl and heterobiaryl groups are unsubstituted or substituted with halogen, OH,  $\text{C}_1\text{-C}_4$  alkyl, or  $\text{C}_1\text{-C}_4$  haloalkyl;

$\text{R}_8$  is selected from the group consisting of  $\text{C}_1\text{-C}_4$  alkyl, and  $\text{C}_1\text{-C}_4$  haloalkyl;

$\text{R}_9$  and  $\text{R}_{10}$  are each independently selected from the group consisting of hydrogen,  $\text{C}_1\text{-C}_4$  alkyl, and  $\text{C}_1\text{-C}_4$  haloalkyl; and

$\text{R}_{11}$  and  $\text{R}_{12}$  are each independently selected from the group consisting of  $\text{C}_1\text{-C}_6$  alkyl,  $\text{C}_3\text{-C}_6$  cycloalkyl, phenyl, biaryl, heteroaryl, or heterobiaryl, wherein the  $\text{C}_1\text{-C}_6$  alkyl,  $\text{C}_1\text{-C}_6$  cycloalkyl, phenyl, biaryl, heteroaryl, and heterobiaryl groups are unsubstituted or substituted with halogen, OH,  $\text{C}_1\text{-C}_4$  alkyl, or  $\text{C}_1\text{-C}_4$  haloalkyl, or when  $\text{R}_3$  represents  $\text{NR}_{11}\text{R}_{12}$ ,  $\text{R}_{11}$  and  $\text{R}_{12}$  may be taken together to form an optionally substituted  $\text{C}_3\text{-C}_6$  aliphatic or  $\text{C}_3\text{-C}_6$  aromatic heterocyclic ring.

52. (New) A method according to Claim 51 wherein the particle is a polymeric bead.